

Social Impacts

Various researchers have examined the relationship between nonmetro recreation and social conditions in a community. Page et al. (2001) note that rapid population growth in nonmetro recreation counties has resulted in overcrowded conditions and traffic congestion. Recreation may also affect local poverty rates. Some authors have argued that recreation activity creates new sources of employment, helping to raise the poor from poverty (Gibson, 1993; Patton, 1985). Others have pointed to the low-wage, seasonal, and part-time nature of many tourism jobs, arguing that tourism may actually add to the number of poor in the community (Galston and Baehler, 1995; Smith, 1989). Recreation affects social conditions in other ways. For example, Page et al. argue that tourism and recreation activity may help to maintain or improve local services, such as health facilities, entertainment, banking, and public transportation, because of the increased demand that tourists generate for these activities. The relationship between recreation and crime has also been explored by a number of researchers (Rephann, 1999; Page et al., 2001; McPheters and Stronge, 1974), with a popular question being whether casinos increase criminal activity (Rephann et al., 1997; Hakim and Buck, 1989).

To address social impact concerns, we identified eight social indicators. Two involve conditions associated with rapid population growth; one identifies a population subgroup (persons in poverty) that may present special challenges; two relate to education; two deal with health-related concerns; and one measures crime.

Population Growth

The first social variable we examined was the county population growth rate during the 1990s. Population growth can be beneficial for stagnant or declining rural areas looking for new sources of employment and income, but in some places it can bring problems. This is particularly true if growth occurs rapidly and haphazardly, contributing to sprawl, traffic congestion, environmental degradation, increased housing costs, school overcrowding, a decrease in open land, and loss of a “sense of place” for local residents.

Perhaps because of their natural amenities and tourist attractions, recreation counties experienced a 20.2-percent rate of population growth between 1990-2000, nearly triple the 6.9-percent rate for other nonmetro counties during the same period (table 3). These results are consistent with our linear regression analysis, which found a positive and statistically significant relationship between recreation and the county population growth rate. Further analysis revealed an apparent curvilinear relationship, in which recreation counties with moderate recreation dependencies experienced higher growth rates than those with smaller and larger recreation dependencies.¹⁶

Travel Time to Work

This variable was included to test the hypothesis that growth in recreation counties may lead to increasing traffic congestion (Page et al., 2001). We found that mean commute times for recreation and other rural counties were not significantly different in 2000. Moreover, during the 1990s, commute

¹⁶The recreation dependency variable had a statistically significant positive coefficient, while the recreation dependency squared variable had a statistically significant negative coefficient.

Table 3

Social conditions in nonmetro recreation and other nonmetro counties

Indicator	Type of county	
	Recreation	Other nonmetro
Population growth 1990-2000	20.2	6.9
	<i>Percent</i>	
Mean travel time to work in 2000	22.7	23.0
Change 1990-2000	4.4	4.3
	<i>Minutes</i>	
Poverty rate in 1999	13.2	15.7
	<i>Percent</i>	
Change 1989-1999	-2.6	-3.1
	<i>Percentage points</i>	
Residents without a high school diploma in 2000	18.4	25.0
	<i>Percent</i>	
Change 1990-2000	-7.4	-8.4
	<i>Percentage points</i>	
Residents with at least a bachelor's degree in 2000	19.2	13.6
	<i>Percent</i>	
Change 1990-2000	4.0	2.4
	<i>Percentage points</i>	
Physicians per 100,000 residents in 2003	123.0	83.4
	<i>Number</i>	
Age-adjusted deaths per 100,000 residents in 2003	817.3	898.3
	<i>Percent</i>	
Rate of serious crime per 100 residents in 1999	2.8	2.4

Note: These are county averages (simple means).

Source: ERS calculations based on data from U.S. Bureau of the Census, U.S. Department of Commerce, Department of Health and Human Services, and the FBI.

times increased at roughly the same rate (4.4 percent for recreation counties vs. 4.3 percent for other rural counties). The regression analysis, however, revealed a significant negative relationship between recreation dependence and change in travel time to work during the 1990s. One explanation may be that expanded economic opportunities in recreation counties during the 1990s meant that residents had to travel shorter distances for jobs.

Poverty Rate

Poverty poses a problem for communities by increasing the costs of providing public services and contributing to crime rates, health problems, and neighborhood blight. Previous research has found that an expanding tourist industry is linked with a decreasing rate of poverty (Rosenfeld et al., 1989; John et al., 1988). Given that many recreation counties have attracted well-off retirees and that average income levels have risen in recreation counties, the counties might, on average, be expected to have fewer individuals living in poverty than other nonmetro counties. However, as noted earlier, some have argued that tourism, by expanding the number of low-paying, part-time jobs, could increase the number of individuals living in poverty in these counties (Galston and Baehler, 1995; Smith, 1989).

We found that the poverty rate was substantially lower in recreation counties than in other rural counties. In 1999, 13.2 percent of all residents in recreation counties were living in poverty, compared with 15.7 percent in other nonmetro counties. Mirroring the national trend of declining poverty rates during the 1990s, the proportion of residents living in poverty during the decade declined (at approximately the same rate) in both recreation and other rural counties.¹⁷ Our regression analysis also found a significantly negative relationship between recreation and the poverty rate.¹⁸ In addition, the regression analysis found a statistically significant negative relationship between recreation and the change in the poverty rate.

Educational Attainment

Previous research has identified the central role that education plays in rural poverty (McGranahan, 2000). Education is important, not only because it contributes to the economy, but also because it can affect the quality of life in rural communities and can help raise people out of poverty. Nonmetro areas with lower levels of education tend to be poorer and offer fewer economic opportunities for their residents. Migration (movement to another area) tends to increase with higher levels of education (Basker, 2002; Greenwood, 1993; Greenwood, 1975). Hence, recreation counties, which have had many in-migrants in recent years, may be expected to have higher levels of educational attainment than other nonmetro counties. English et al. (2000) found rural tourism to be associated with higher levels of educational attainment. We examined educational attainment at two levels: high school and college.

Our results show that residents in recreation counties have higher levels of education than other nonmetro residents (fig. 5). Recreation counties have both a smaller share of residents 25 years or older without a high school education, and a higher share of those with at least a bachelor's degree, than residents of other nonmetro counties. In 2000, 18.4 percent of residents age 25 or older in recreation counties did not have a high school diploma, compared with 25 percent in other nonmetro counties. For the same year, 19.2 percent of recreation county residents age 25 or older had a 4-year college degree or higher, compared with 13.6 percent in other nonmetro counties. During the 1990s, educational attainment on both measures improved in recreation as well as other nonmetro counties. These findings

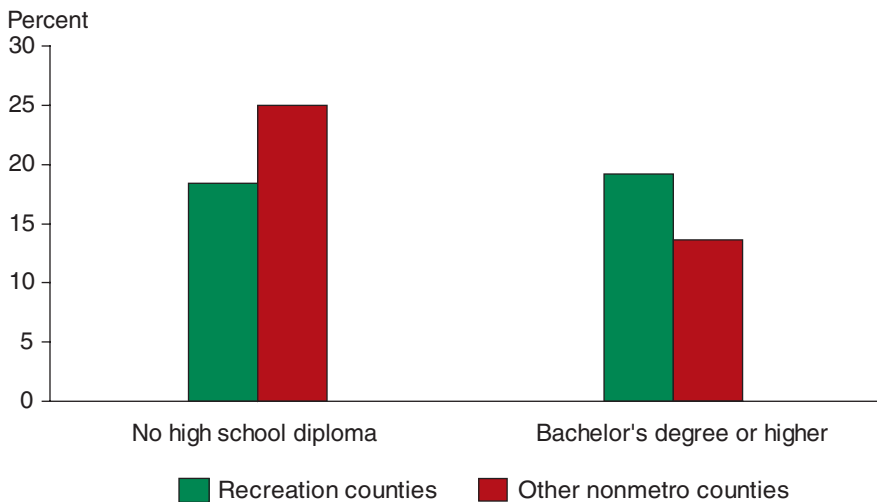
¹⁷Both recreation and other rural counties had rates of poverty in 1999 higher than the 11.8 percent of metro counties.

¹⁸English et al. (2000) found no such relationship.

Figure 5

Educational attainment in recreation and nonrecreation counties, 2000

Recreation counties have significantly higher levels of educational attainment



Source: Calculated by ERS using data from U.S. Census Bureau, Department of Commerce.

are supported by our regression analysis, which found that recreation had a significant negative correlation with the share of residents without a high school diploma and a significant positive correlation with the share of residents with a bachelor's degree or higher. In addition, a statistically significant relationship was found between recreation and an increase in the share of college-educated residents during the 1990s. However, the change in the share of high school graduates during the 1990s, although positive, was not significantly related to recreation.

Health Measures

Health is important for quality of life. In some recreation counties, many individuals moving in are retirees who demand more from health services than younger people; this could result in improved health services in these places. Many recreation counties are in pristine locations with clean air and water, which might also lead to better overall health. In addition, residents in recreation areas are probably more likely to be involved in outdoor activities than individuals in other nonmetro areas, which may also promote better overall health.

Our indicators of local health conditions—the number of physicians available and the age-adjusted mortality rate—support the view that recreation county residents have better health and health services than other nonmetro residents. In 2003, recreation counties had 123 physicians per 100,000 residents, compared with 83.4 per 100,000 residents in other nonmetro counties. The analysis also shows that the age-adjusted death rate (computed as a 3-year average) was almost 10 percent lower in recreation than in other nonmetro counties.

Our regression results show that recreation had a significantly negative correlation with the age-adjusted death rate. However, the relationship between recreation and the number of physicians, although positive, was statistically insignificant.

Crime Rate

Many researchers have looked at the link between recreation activity and crime (Page et al., 2001; Rephann, 1999; McPheters and Stronge, 1974). Some types of recreation counties attract criminals who prey on tourists in-season and rob unoccupied houses during the off-season. Also, some low-income residents of these counties may commit crimes of opportunity, taking advantage of the influx of well-off outsiders. Some researchers have argued that crime may be particularly associated with casinos (Rephann et al., 1997; Hakim and Buck, 1989).

The results of our analysis indicate that recreation counties had nearly a 17-percent higher rate of serious crime (murder and non-negligent manslaughter, forcible rape, robbery, and aggravated assault) than other nonmetro counties. In 1999, the overall rate of serious crime in recreation counties was 2.8 incidents per 100 residents, compared with 2.4 incidents per 100 residents in other nonmetro counties, a statistically significant difference. These results are consistent with our regression analysis, which found that a significantly positive relationship exists between recreation and the crime rate.

However, the meaning of this finding is not clear because the crime rate is a biased measure in recreation areas, due to the fact that crimes committed against tourists and seasonal residents are included in the total number of crimes (the numerator of the crime rate), while tourists and seasonal residents are not included in the base number of residents (the denominator of the crime rate). So the crime rate is expected to be higher in recreation areas, even if residents of these areas are not more likely to be crime victims than residents of other rural areas.